

## Marketing Bulletin

**DATE:** Monday, June 01, 1998  
**TO:** Affected Customers  
**FROM:** Marketing  
**RE:** ECCM3 Series Termination

To all concerned parties,

This bulletin is to notify all customers of the discontinuation of the ECCM3 series Ecliptek crystal effective Monday, June 01, 1998.

In compliance with our End of Life (EOL) policy, this notice will serve as advanced notice of product termination. New orders will not be accepted after Thursday, April 01, 1999, with delivery to be conclude by Tuesday, June 01, 1999.

The ECCM5 series is a recommended alternate for the ECCM3 series. This may not be an exact cross, so it is highly recommended that the data sheet(s) of the recommended alternate are reviewed and samples tested to ensure conformance.

If there are any questions pertaining to this bulletin, please contact your Ecliptek sales representative. Thank you again for your cooperation.

Ecliptek Marketing

## STANDARD SPECIFICATIONS

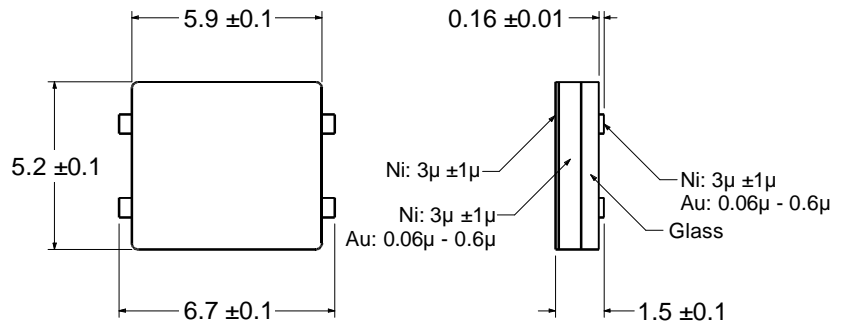
Frequency Range:	11.000MHz to 120.000MHz
Frequency Tolerance @ 25°C	
2	±10ppm
3	±15ppm
4	±20ppm
5	±30ppm
Frequency Stability	See Table 1 for Available Frequency Stabilities
Shunt Capacitance (C0)	5pF Maximum
Load Capacitance (CL)	18pF Standard, CL ≥ 10pF and Series Available
Mode of Operation	
Blank	Fundamental from 11.000MHz to 39.999MHz
T	Third Overtone from 40.000MHz to 120.000MHz
Operating/Storage Temperature	See Table 1 for Operating Temperature / -40°C to +85°C
Drive Level	100µWatts Maximum
Aging @ 25°C	±2ppm/year Maximum
Equivalent Series Resistance	30 Ohms Maximum 11.000MHz to 39.999MHz (Fundamental) 50 Ohms Maximum 40.000MHz to 120.000MHz (Third Overtone)
Insulation Resistance	500 Megaohms Minimum at 100Vdc

## ENVIRONMENTAL & MECHANICAL

Shock:	Conditions and Criteria Listed in TQC41-883-007
Vibration:	Conditions and Criteria Listed in TQC41-883-008
Seal Integrity:	Conditions and Criteria Listed in TQC41-883-003
Solderability:	Conditions and Criteria Listed in TQC41-883-004 / 75% coverage
Marking Permanency:	Conditions and Criteria Listed in TQC41-883-001

**TABLE 1: PART NUMBERING CODES**

OPERATING TEMPERATURE		FREQUENCY STABILITY (PPM) X Denotes Availability					Code Range
Range	Code	A ±5	B ±10	C ±15	D ±20	E ±30	
-10°C to +60°C	A	X	X	X	X	X	
-20°C to +60°C	B		X	X	X	X	
0°C to +70°C	C		X	X	X	X	
-10°C to +70°C	D		X	X	X	X	
-20°C to +70°C	E		X	X	X	X	
-30°C to +60°C	F					X	
-20°C to +80°C	G					X	



## PART NUMBERING GUIDE

**ECCM3 2 A B T - 20 - 70.000M TR**

- Packaging Options**  
Blank = Bulk  
TR = Tape & Reel (CPA70-131-000)
- Frequency**
- Load Capacitance**  
Blank = 18pF (standard)  
S = Series, XX = XXpF
- Mode of Operation**  
Blank = Fundamental  
T = Third Overtone
- Operating Temperature Range**  
Code Per Table 1
- Frequency Stability**  
Code Per Table 1
- Frequency Tolerance**  
Code per Frequency Tolerance @ 25°C Listed Under Standard Specifications (2, 3, 4, or 5)

## MARKING GUIDE

(Line #1) **ECLIP**

(Line #2) **XX.XXXX**

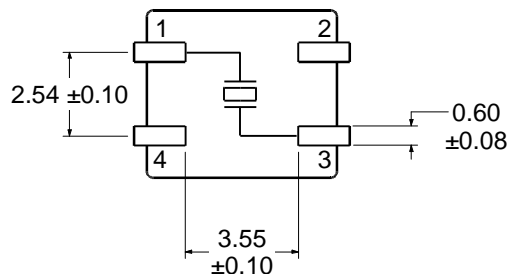
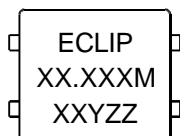
Frequency

(Line #3) **XX Y ZZ** — Week of Year

Last Digit of Year

Ecliptek Manufacturing Code (TEN02-001-000)

**NOTE:** Marking shall conform to conditions listed in TQC41-001-000.




## PAD CONNECTIONS

- #1: CRYSTAL
- #2: NO CONNECT
- #3: CRYSTAL
- #4: NO CONNECT

ALL DIMENSIONS  
IN MILLIMETERS

## SPECIFICATION CONTROL DRAWING

 ECLIPTEK <sup>®</sup> CORPORATION		Drawing Number CCR31-002-000		
Title 1.5mm GLASS SURFACE MOUNT CRYSTAL				
Revision D		Effectivity Date		
ECN Number 2990		PAGE 1 OF 2		
Approved By		Date	Released By	Date